

SPERM PROTEIN 17 FOR THE DIAGNOSIS AND  
TREATMENT OF CANCER

## **ABSTRACT OF THE DISCLOSURE**

5 The results herein identify Sp17 as a novel cancer-  
testis antigen in multiple myeloma. Sp17 recombinant  
protein was generated from E. coli. A CD8 predominant CTL  
line was generated that was able to lyse autologous  
targets in a Sp17-dependent HLA class I-restricted manner,  
10 using dendritic cells as the antigen-presenting cells and  
DOTAP to deliver the Sp17 protein to the dendritic cells.  
A combination of HLA-matched and mismatched antibody-  
enriched fresh myeloma tumor cells and myeloma cell lines  
were used as targets for the recombinant protein-  
15 propagated CTL. The findings of target cell lysis suggest  
that the Sp17 protein produced by Sp17<sup>+</sup> tumor cells are  
processed and presented in vivo and that the CTL epitopes  
are presented in association with HLA class I molecules in  
a concentration and configuration recognized by  
20 recombinant protein-propagated CTL.